

**SYSTEM AND METHOD FOR SEQUENCING AND PERFORMING VERY HIGH  
SPEED SOFTWARE DOWNLOADS CONCURRENT WITH SYSTEM TESTING IN AN  
AUTOMATED PRODUCTION ENVIRONMENT**

**Abstract**

Method and system for performing very high speed software downloads concurrent with system testing in an automated production environment and for test-sequencing in multi-tasking environments with consolidated automation and interactive operations is described. In one embodiment, during diagnostics and software download, a multi-tasking OS is booted on a target computer system, thereby enabling diagnostics to be run at the same time the software download is performed. A visual step-sequencing engine provides the ability to sequentially execute steps, as well as to execute steps in parallel and to combine parallel and sequential steps into loops. The sequencing engine provides a visual representation of the current run status of the target system in a Main window. The sequencing engine also integrates EMR debug tools into the same application so that EMR debug technicians can run failing steps directly from the application via an EMR Control window thereof and consolidates logs into a single location within the application viewable via a Logs window thereof.